

Attorney Docket #: P132-US

IN THE CLAIMS

Please amend claim 67 as follows.

Please cancel claims 1-66 without prejudice.

67. (currently amended) A microelectromechanical package, comprising:
a package substrate;
a microelectromechanical device having a surface to be lubricated, wherein the microelectromechanical device is disposed on the package substrate;
a container containing a lubricant that evaporates from an opening of the container so and contacts the surface to be lubricated; and
a package cover that is bonded to the package substrate for sealing the package.
68. (original) The package of claim 67, wherein the container is a capillary tubing.
69. (original) The package of claim 67, wherein the container is a cylinder.
70. (original) The package of claim 68, wherein the microelectromechanical device is a micromirror device.
71. (original) The package of claim 70, wherein the micromirror device comprises a micromirror assembly having two substrates.
72. (original) The package of claim 71, wherein the two substrates are bonded together; and wherein the bonded substrates have an opening between the substrates such that the lubricant flows through the opening and contact the surface to be lubricated between the substrates.
73. (original) The package of claim 72, wherein the one of the two substrates is glass that is transmissive to visible light, and the other one is a standard semiconductor wafer.
74. (original) The package of claim 73, wherein the glass substrate has an array of micromirrors formed thereon.

Attorney Docket #: P132-US

75. (original) The package of claim 74, wherein said the other substrate has an array of electrodes formed thereon for deflecting the micromirrors.
76. (original) The package of claim 75, wherein the glass substrate having the micromirrors is further to the package substrate than the substrate on which the electrode array is formed.
77. (original) The method of claim 75, wherein the lubricant comprises a perfluoropolyether.
78. (original) The method of claim 77, wherein the perfluoropolyether has a molecular weight of from 500 to 5000.
79. (original) The method of claim 75, wherein the lubricant comprises a perfluorinated hydrocarbon.
80. (original) The method of claim 79, wherein the perfluorinated hydrocarbon comprises 20 carbons or less.
81. (original) The method of claim 80, wherein the perfluorinated hydrocarbon is selected from alkanes, alcohols, ethers and glycols.
82. (original) The method of claim 75, wherein the lubricant comprises a perfluorinated hydrocarbon.
83. (original) The method of claim 75, wherein the lubricant has a melting temperature of around 50°C or lower.
84. (original) The method of claim 75, wherein the lubricant has a boiling temperature of around 100°C or higher.
85. (original) The method of claim 75, wherein the lubricant has a surface tension of 20 dynes/cm or lower.

Attorney Docket #: P132-US

86. (original) The method of claim 75, wherein the lubricant has a viscosity in liquid phase of from 2 to 100 cP.
87. (original) The method of claim 75, wherein the lubricant is mixed with a diluent that comprises: a perfluorinated hydrocarbon.
88. (original) The method of claim 87, wherein the lubricant diluent is liquid at room temperature.
89. (original) The method of claim 87, wherein the lubricant diluent does not decompose at a temperature of 200°C.
90. (original) The package of claim 75, further comprising: a sealing material between the package substrate and the package cover for hermetically sealing the package.
91. (original) The package of claim 75, wherein the capillary tubing has an interior diameter of from 2 to 500 micrometers.
92. (original) The package of claim 75, wherein the capillary tubing has an interior diameter of from 100 to 200 micrometers.
93. (original) The package of claim 75, wherein the amount of the lubricant inside the capillary tubing is determined by an interior volume of the capillary tubing.
94. (original) The package of claim 75, wherein the capillary tubing has an interior volume that generally equals a particular amount of lubricant necessary for lubricating the surface.
95. (original) The package of claim 94, wherein the particular amount of the lubricant is from 10 μ l to 10 μ l.
96. (original) The package of claim 95, wherein the particular amount of the lubricant is from 30 μ l to 2 μ l.